



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4628

May 28, 2010

William Restrepo
Chief Financial Officer
Smith International, Inc.
1310 Rankin Road
Houston, Texas 77073

Re: Smith International, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed March 1, 2010
File No. 1-08514

Dear Mr. Restrepo:

We have reviewed your filing and have the following comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Smith International, Inc. Form 10-K

Business Operations, page 2

Non U.S. Operations, page 5

1. We note from disclosure on page 5 that you conduct operations in Iran, Syria and Sudan. Please describe to us the transactions, contracts, agreements and understandings you have entered into with Iran, Syria and Sudan since your letter to us of August 8, 2008 and provide us with an updated materiality analysis of your contacts with these countries individually and in the aggregate, and whether these contacts constitute a material investment risk for your security holders. You should address materiality in quantitative terms, including the approximate dollar amount of your revenues, assets and liabilities associated with Iran, Sudan and Syria. Please also address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon your reputation and share value.
2. We note the statement that you are actively pursuing the termination of all business activities in Iran and Sudan. Please update us on the status of this, including your proposed timetable for termination, whether and how long you anticipate continuing business in these countries pursuant to contractual obligations, and whether you will close any offices in these countries.

Risk Factors, page 8

Our business operations in countries outside the United States are subject to a number of U.S. federal laws and regulations..., page 10

3. Please describe to us the nature of the activities underlying the subpoena you received with respect to historical business practices in Iran and Sudan.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in

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possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Sean Donahue at (202) 551-3579 or me at (202) 551-3645 with any questions.

Sincerely,

H. Roger Schwall
Assistant Director